

the Examiner discussed the unexpected results obtained by practice of the invention and the failure of the prior art to teach those unexpected results.

II. Outstanding Rejections

Claims 1-6 stand rejected under 35 U.S.C. §103(a) over Suganuma et al. and further in view of Shen et al.

Claim 6 further stand rejected under 35 U.S.C. §103(a) over Suganuma et al. in view of Shen in view of Hoeltke et al. and further in view of Hoeltke et al. and further in view of Stratagene.

III. Patentability Arguments

As discussed at the Interview, Applicants' invention is directed to dried mixtures of random primers and relates to the discovery that self-annealing occurs when random 9-mers (and longer oligonucleotides) are used in dried predispersed labeling kits. This problem is specific to dried 9-mers and longer oligonucleotides and does not represent a problem with shorter dried primers. Evidence showing this effect with dried primers is presented as reflected in self-priming activity and labeling intensity in the examples within the specification as discussed at the Interview.

While the prior art discloses primers of various lengths including dried primer preparations, there is no disclosure by Suganuma of dried compositions or teaching that self-annealing represented a limitation for dried primer compositions. Moreover, the art failed to teach that dried 6-mer to 8-mer compositions would be preferred to longer dried primers because of the general prejudice in the art that longer primers were preferable to shorter primers because longer primers have higher hybridization melting temperatures and are more stable and specific.

While Suganuma identified the occurrence of self-annealing in longer primers in solution, there was no suggestion by Suganuma or expectation in the art that self-annealing occurs when random 9-mers are used in dried predispersed labeling kits and that this limits their stability and shelf life.

To the extent that Shen et al., Hoeltke et al. or Stratagene teach use of dried primer compositions generally, there is no teaching that 6-mer to 8-mer compositions are preferred. Accordingly, the secondary references fail to make up for this deficiency in Suganuma and the rejections under 35 U.S.C. §103(a) should be withdrawn.


IV. Conclusion

For the foregoing reasons each of claims 1-6 should be allowed. Should the Examiner wish to discuss any further matter of form or substance, she is encouraged to contact the undersigned attorney at the telephone number listed below.

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